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■ ■

*Write for illustrations and prices*

# Violet Ray Technique

and

## Direction for Treatment

with the

**WHITE+CROSS**

# Violet Ray Generator

By

LESLIE D. SMITH, M. D.



Published by

NATIONAL STAMPING & ELECTRIC WORKS

3212-3246 West Lake Street

CHICAGO



## FOREWORD

In publishing this booklet we have tried to be as clear, and concise as possible so that the novice will readily understand the treatment of ailments by the White Cross Violet Ray Generator.

There is no doubt as to the curative value of High Frequency, but we do not claim it as a "cureall." It will not cure any incurable disease, or any disease which requires other means of treatment. When in doubt about your condition consult a reliable physician.

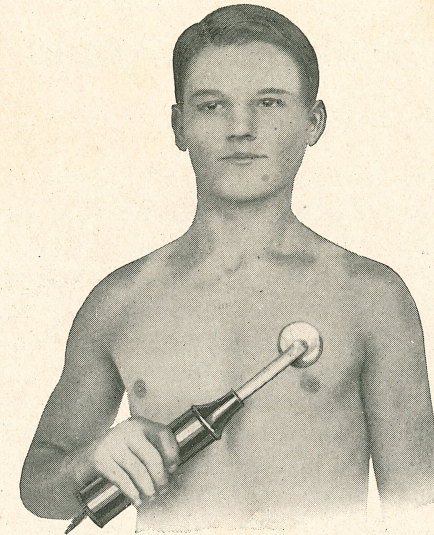
## A WORD OF CAUTION

All instruments when connected to the electric light current, commonly called commercial current, should not under any circumstances be used in the bathtub, or when any part of the body is in contact with a water, sewer or gas pipe, radiator or any other metallic fixtures, as this may cause a severe shock to the operator.

The above condition can also be caused by standing on a damp floor which is in any way connected to the ground.

Do not use instruments when connected to the commercial current during electrical storms.

The above conditions are true of any electrical apparatus operated on the electric light current.



## WHAT IS HIGH FREQUENCY CURRENT?

High Frequency Current is an alternating (oscillating) current in which the frequency is beyond the point of producing muscular contraction. The pulsations or Vibrations are so rapid that they can not be conceived by the sensory nerves. This makes treatment with the White Cross Violet Ray pleasant to administer. Its great penetrating power enables deep seated, and ailments of long standing to be greatly benefited.

## WHAT VIOLET RAYS DO

Through the glass electrode, by the use of powerful coils and condensers, is created electric energy, heat, light, ozone and thousands of minute vibrations per second. It also has a wonderful power over infections and its germ destroying powers are marvelous.

Violet Rays or High Frequency current is unipolar; that is, it does not require a complete circuit. From the electrodes you can readily see the rays flowing into space. These rays are capable of traversing long distances as ether waves do in wireless telegraphy and telephony.

In ordinary electricity glass is an insulator, but High Frequency currents easily pass through glass.

The High Frequency also generates enormous quantities of Ozone, which is so beneficial for many ailments.

It not only permeates every cell in the body but emanates from it.

The High Frequency Current produces a deep-seated cellular massage. The contractile effect is expended upon the individual cells making up the tissues, instead of an individual muscle. For this reason High Frequency Current produces such a marked effect on nutrition and general health.



## DIFFERENT METHODS OF TAKING TREATMENT

Short, frequent treatments are better than long applications.

**General Application**—Surface treatments can be either taken in direct contact with the skin and also through the clothing, or through a handkerchief or several layers of gauze. As any of the latter are resistances, treatment through them will cause small sparks to be transmitted from the electrode which penetrate deeply into the body. In many cases a spark is recommended, and all these treatments can be taken in this manner. The same results are obtained by holding the electrode a short distance from the skin.

All objects of metal as corset steels, hair pins, chains, should be taken off if they can not be avoided in the treatment.

Where no other treatment is advised, the electrode should be in direct contact with the skin.

Electrode can be placed on the part to be treated before the current is turned on, and the current turned off before the electrode is removed. This will eliminate the spark.

**Indirect Application**—This method of treatment requires two persons. The party to be treated holds the electrode in one hand. The other party either with the hand, finger tips or another electrode, draws the High Frequency Current to the area to be treated. This method is agreeable when delicate treatment around the eyes, nose, etc., is desired.

## STIMULATION AND SEDATION

**Stimulation**—By holding the electrode a short distance away from the skin over the area to be treated, small stimulating sparks are produced. The stimulating actions are more beneficial than drugs.

Stimulating treatments are best produced by application through the clothing or through a towel which has been placed over the part to be treated. The length of the spark depends on the thickness of the material. Anything from a handkerchief to a doubled Turkish towel can be used. Powdering the skin with talcum powder often suffices to create the desired resistance.

Stimulation is invaluable in the treatment of Rheumatism, Lumbago, Neuritis, Skin Disease, or wherever circulation is needed.

**Sedation**—This is produced by holding the electrode in one hand or in contact with any part of the body. This treatment is very pleasant and highly beneficial. The quieting and tranquilizing effects are indispensable for nervous ailments.

## INTERNAL TREATMENTS

All orificial electrodes, for taking internal treatments must be lubricated well before insertion. Internal treatments are not painful, in fact, there is on other sensation than that of beneficial warmth during the application.

Treatments should not last longer than five minutes. It is advisable during the application to move the electrode slightly, so as to avoid its sticking to the mucous membrane. It is also advisable to have someone perform the treatment. Properly sterilize the electrodes after each treatment. Internal treatments should only be taken under a physician's advice.

In taking these treatments always turn the current on **after** insertion of the electrode, and turn the current off **before** removing.

## FULGURATION

In Fulguration or cauterization which is used to remove warts, moles, etc., electrode No. 25 should be used. Approach the point of the electrode to about one-thirty second of an inch from the spot to be cauterized. From a few seconds to one minute usually produces the desired results.

The application can be repeated after sufficient time has been allowed to determine the extent of the destruction of the tissue. This may be from two to several days. Several treatments usually give the desired results.

## CARE OF ELECTRODES

Where there are several people using the instrument, care should be taken to thoroughly sterilize the glass or metal electrodes. This can be either done by boiling or placing them in a strong antiseptic solution, as crethol or lysol. Always rinse the sterilized electrodes in warm water before using.



## EFFECTS OF VIOLET RAY TREATMENTS

According to Noble M. Eberhart, M.D., Ph.D., D.C.L.

1. Increase blood-supply to a given area.
2. Increase oxidation and local nutrition.
3. Increase oxygenation of blood.
4. Increase intake of oxygen.
5. Increase output of carbon dioxide.
6. Increase secretions.
7. Increase elimination of waste products.
8. Liberate ozone, with the resultant benefit of more or less of this ozone being inhaled by the patient, and also probably carried directly into the tissues.
9. Increase bodily heat, without a corresponding rise in temperature.
10. Locally germicidal.
11. Mild and medium sparks stimulate or soothe according to length and character of application.
12. Strong sparks are caustic.
13. Sparks to spine increase arterial tension.
14. Promote absorption of plastic exudates or adhesions.

## DIRECTIONS FOR TREATMENT

**ABSCCESS**—Use electrode No. 1, in contact with the affected area. Mild treatment. Duration of treatment, seven to ten minutes. May be repeated a few times daily.

**ACNE (Pimples)**—Use electrode No. 1, moving it slowly over the affected area for about six minutes. Powder the skin thoroughly with talcum powder to allow electrode to move freely. Where pustules are forming raise the electrode slightly to give a short spark for several seconds. If many pustules are present, treat through a handkerchief. Treatments should be taken three to five times a week.

**ANEMIA**—Commonly called "Thin Blood." Use electrode No. 1, treating over the back, spine, abdomen and chest. Special attention given to treatment from the ninth dorsal down to the lumbar vertebra. (See Chart A.) It is well to use talcum powder over the parts to be treated. Duration of treatment, four to six minutes, once daily. Ozone inhalations are also of great value.

**ALCOHOLISM and Drug Addictions**—Spinal Electrode No. 6, used with a sharp spark from the fifth to ninth dorsal. Electrode No. 1 with a sharp spark over Liver and Solar Plexus. See Chart A. Duration of treatment, six to eight minutes, daily.

Cocaine Habit—Electrode No. 1. Treat through a towel or clothing with mild current to the soles of the feet, and to the arms and legs. Duration of treatment, until marked reddening results.

Morphine or Opium—Treat same as Alcoholism.

Do not apply High Frequency current through the shoes.

**ARTERIOSCLEROSIS (High Blood Pressure)**—Use electrode No. 1, over entire body. Medium strength. Duration of treatment, seven to eight minutes.

**ASTHMA**—Electrode No. 1, applied over the chest, with as sharp a spark as can be tolerated. Also use Throat Electrode No. 4, on Throat Glands. Duration of treatment, six to eight minutes daily.

**BACKACHE**—General treatment over the sore muscles with electrode No. 1, occasionally using a medium spark, for five minutes daily.

**BALDNESS (or Falling Hair)**—Use either electrode No. 1 or No. 3 but preferably the latter. Mild treatment at first, gradually increasing the strength, occasionally lifting the electrode to produce short sparks. Duration of treatment, four minutes daily, or two treatments of three minutes each, daily. The course of treatment must be an extended one. In connection with the treatment, a few minutes' use of an Electric Vibrator is strongly advised.

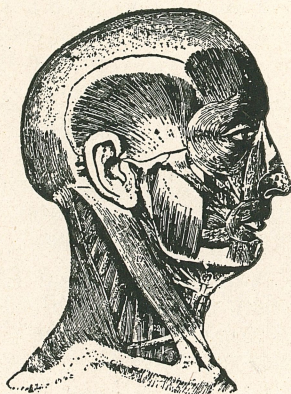
**BARBER ITCH**—Use Electrode No. 1. Treatment through a handkerchief is advisable. Mild current. Duration of treatment, five minutes daily. Long continued treatments are needed.

**BLACKHEADS**—(Treat same as Acne.)



**BOILS**—(Treat same as Abscess.)

**BRAIN FOG**—Use Electrode No. 1 with a medium spark to the forehead, over the eyes and to the back of the head and neck. Duration of treatment, five minutes. Then apply a sharp spark up and down the entire spine for four or five minutes, then over the abdominal region for three minutes, finishing up with a short application over the eyes and back of the neck. (Two or three minutes' inhalation of ozone after the high frequency treatment is desirable.)



Muscles of the Face and Neck

**BRONCHITIS**—Use Electrode No. 1, with a sharp spark, or treat through a heavy towel, over entire chest and back, until redness is produced. Ozone Generator should be used for five minutes. Repeat two or three times daily.

**BUST DEVELOPMENT**—Respiratory exercises, deep, slow breathing, expanding the chest as much as possible in inhaling and expelling the air without force (slowly) three to ten times a day. Use electrode No. 1, moving it lightly over each side, from the neck downward, also from arm pit to arm pit, under each breast, pressing lightly upward. Duration of treatment, five to eight minutes.

**BUNIONS**—Use Electrode No. 1, strong current applied over inflamed area, followed by a gentle spark. Treatment, six minutes daily.

**BRUISES**—Treat with Electrode No. 1, over the injured area, and later with increasing spark as treatment progresses. Duration of treatment, two to three minutes.

**CALLOUSES**—Electrode No. 1 can be used but we recommend Fulguration Electrode No. 25. Medium sparks and strong current from one to two minutes. Repeat as needed. Should soreness follow after fulguration treatment, treat over painful area with electrode No. 1 for a few minutes.

**CARBUNCLES**—Use Electrode No. 1, treating over the carbuncle for five or six minutes daily. Use a medium current.

**CATARRHAL CONDITIONS**—Use ozone generator two or three times daily, for at least five minutes at a time. Also use Nasal Electrode No. 19. Insert in nostrils, using a mild treatment for three minutes. Insert electrode before turning on current.

**CHILBLAINS**—Use Electrode No. 1 over affected area, using a medium current. Duration of treatment, six to eight minutes daily.

**CONSTIPATION**—Use Electrode No. 1, over the abdominal region, mild current from six to seven minutes. Repeat daily. Also treat from lower part of neck to hips, to stimulate dorsal and lumbar nerves to the intestinal tract and other internal organs. (See Chart A.)

**CORNS**—Use Fulguration Electrode No. 25. Hold electrode  $\frac{1}{8}$  inch from corn and allow spark to pass into the hard tissue only. Medium current. Duration of treatment, fifteen to thirty seconds. For after relief use Electrode No. 1, applying for a few minutes. (See Fulguration, page 5.)

**COLD IN HEAD (Coryza)**—No. 1 Electrode, over nose, above eyes and the sides of face. Medium current from two to three minutes, three times daily. Use Ozone Generator several minutes each day. Mild current with Nasal Electrode No. 19 is also advisable.

**COLD IN LUNGS**—Treat the chest and back in the same manner as explained under Asthma.

**DANDRUFF**—Same treatment as Baldness.

**DIABETES**—Use Electrode No. 1, with a medium spark treating over the abdomen; also treat the spine from the first to the fourth cervical vertebrae, and from the fifth to the eleventh dorsal. Duration of treatment, seven to eight minutes, twice daily. Follow proper diet given under physician's care.

**DYSPEPSIA**—Use Electrode No. 1, treat over stomach and solar plexus and along spine from the fifth dorsal down to the hips. Duration of treatment, six minutes, daily with a very strong current.

**ECZEMA**—Use Electrode No. 1 over affected areas. Spark about  $\frac{1}{4}$  to  $\frac{3}{4}$  inch in length, at short periods, but during greater part of treatment keep electrode in light contact with the surface. Can be taken through a layer of cloth if desired. Treat from three to six minutes daily, mild current at first, increasing as can be tolerated.

**FALLING HAIR**—Same treatment as for Baldness.

**FELONS**—Electrode No. 1, treat over affected area, mild to medium current, three to five minutes daily.

**FLABBY BREASTS**—Use Electrode No. 1, treating around and over breasts and on nipple. Medium current four to six minutes daily.

**FURUNCULOSIS (Boils)**—Same treatment as Abscess.



**GOITRE**—Use throat Electrode No. 4. Keep electrode in light contact with the surface of the skin treating the sides of the neck as well as over the goitre itself. After a few minutes of this treatment, raise the electrode and use short spark with as strong a current as can be tolerated for two or three minutes. Treatment once daily.

**GOUT**—Use Electrode No. 1, over painful area, applying a medium current, and moving the electrode slowly about. A slight aggravation of pain may be present after the first few treatments, but relief will be felt after. No treatment should be taken during an acute attack. Duration of treatment, three to five minutes, daily, or three times a week.



Muscles of the Leg. (External Aspect)

**GRAY HAIR**—Same treatment as Baldness.

**GRIPPE** (Influenza)—Use Electrode No. 1, with a short spark over spine and solar plexus; also mild direct treatment over eyes and sides of nose. Also Nasal Electrode No. 19, for short duration with mild current. Duration of spinal and solar plexus treatment, five to eight minutes, twice daily.

**HAY FEVER**—Electrode No. 1, medium current over and around the nose, also along the spine. Duration of treatment, four minutes. Also nasal electrode No. 19, with mild current in nostrils, for one minute, several times daily.

**HEADACHES**—Nervous headache. Treat with Electrode No. 1. Mild current over forehead, ears, and back of neck. Continue treatment until relief is experienced.

Headache due to stomach disorders. Use Electrode No. 1, mild treatment between and over the eyes, also treatment over abdomen with a short spark. Treat until relieved.

**HIGH BLOOD PRESSURE**—(See Arteriosclerosis.)

**INFANTILE PARALYSIS**—Use spinal Electrode No. 6, holding electrode from  $\frac{1}{4}$  to  $\frac{1}{2}$  inch from body. Treat from 1st cervical to 5th sacral. See Chart A. Also treat over affected areas. Duration of treatment, five to eight minutes, daily. Vibration is strongly advised, in connection with this treatment.

**INFLUENZA**—Same treatment as for Grippe.

**INSOMNIA**—Same treatment as for Brain Fog.

**LUMBAGO**—Use Electrode No. 1, with the muscles "on the stretch." Apply a strong current over the painful areas, using a medium spark. It is advisable to take this treatment through the clothes. Move electrode slowly about. Also treat over the lumbar muscles and lower dorsal and lumbar regions. Continue treatment until pain is dispelled.

**MUMPS**—Use throat Electrode No. 4, with a medium current, for four minutes, followed by short sparks for one minute once every day.

**MOLES**—Use fulguration Electrode No. 25, mild to medium current, treating for a few seconds at a time. (See Fulguration, page 5.)

**NERVOUSNESS**—With Electrodes No. 1 or No. 6, treat the spine, back of head and neck, using a mild current, increasing the current as treatment continues. Duration of treatment, three to five minutes, twice daily.

**NEURALGIA**—Use No. 1 Electrode, moving it slowly back and forth over the painful area, holding electrode in light contact with the skin. At times raise the electrode and apply a sharp counter-irritant spark which will quickly redden the surface. Duration of treatment, five to seven minutes, daily, gradually decreasing length of treatment.

**NEURITIS**—Use Electrode No. 1, at the seat of pain. First use a mild current and apply from three to six minutes, daily, for the first few treatments, then continue with medium spark, with increased current as treatment continues. The first few treatments in most cases aggravate the pain, but continued treatments will bring about splendid results.

**OBESITY**—Apply Electrode No. 1 to the affected areas and treat consistently. Use strong current, treating from seven to ten minutes, twice daily. If there is no actual reduction in weight, there will be a redistribution of the fat, which greatly increases bodily comfort. Strict attention to the diet, exercise and personal hygiene must be observed.

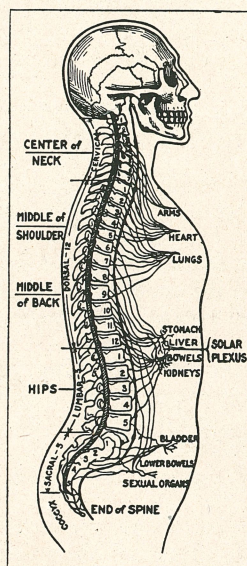
**PARALYSIS**—Apply Electrode No. 1 over the paralyzed muscles and along spine, using a strong current, holding the electrode away from body so as to produce a half or three quarter inch spark. Treatment through a heavy Turkish towel is advisable. Duration of treatment, seven minutes twice daily. The last minute, or so, use the electrode in contact with the paralyzed muscles.



**PAINS**—Use Electrode No. 1, at the seat of the pain, with a medium or strong current, until relief is felt.

**PLEURISY**—Apply Electrode No. 1, medium current. Treat through a layer or two of clothing, and apply over both the chest and back, keeping up the treatment until a marked reddening of the skin occurs. Treat two or three times daily. Use only in connection with physician's advice.

**PNEUMONIA**—Same treatment as for Pleurisy. Ozone Generator should be used repeatedly. Consult reliable physician immediately for either Pleurisy or Pneumonia.



Showing Nerve Centers of Spinal Columns

**PYORRHEA** (Rigg's Disease)—Apply any suitable electrode, using a weak or medium current, for a few minutes daily. Consult a dentist as High Frequency is only an aid to establish a healthy condition of the gums, and on account of its germicidal character.

**RHEUMATISM**—High frequency currents are of exceptional value in muscular and in chronic articular rheumatism. Apply Electrode No. 1 to the painful area, using a medium to a sharp spark. During the treatment change positions frequently to keep the muscles on the stretch. It is advisable to take treatment through several thicknesses of cloth. Duration of treatment, eight to ten minutes, as often as pain reappears. In inflammatory rheumatism consult a physician.

**SCIATICA**—Apply Electrode No. 1 at the 4th and 5th Lumbar, and at the 1st, 2nd, 3rd, 4th Sacral Vertebrae, also at the 12th Dorsal. See Chart A. Also apply at lower part of the hip, and at the back of the leg. Hold electrode at such distance to produce one-half to one inch spark. Duration of treatment, eight to ten minutes, daily or every other day.

**SKIN DISEASES**—Place a piece of gauze over area to be treated. Apply Electrode No. 1, moving it rapidly over part to be treated, for several minutes, twice daily. Where itching is very marked, longer and sharp sparks are best.

**SORE THROAT**—Apply Throat Electrode No. 4 over affected areas. Treat with a medium current. Duration of treatment, five or six minutes, two or three times daily.

**SPRAINS**—Apply Electrode No. 1 over painful areas, keeping it in light contact with the skin, moving it slowly back and forth over the sprain. Use medium current, and in cases of long standing treat with medium current through a towel. Duration of treatment, six to eight minutes, until relief is felt.

**STIFF NECK AND JOINTS** (Torticollis or Wry Neck)—Apply Electrode No. 1, with a strong current, and treat through several layers of cloth placed over the affected area, also over neck region and down to fifth dorsal. Duration of treatment, three to five minutes, several times daily.

**THIN BLOOD**—See Anemia.

**TONSILITIS**—Same treatment as for Sore Throat.

**WARTS AND MOLES**—Apply Fulguration Electrode No. 25, so that it rests directly on top of the wart or mole. Care must be taken so that sparks do not come in contact with the surrounding tissues. Use a weak current. A few seconds' treatment is usually sufficient. Wait two or three days for results and repeat operation if necessary.

**WHOOPIING COUGH**—Follow treatment for Asthma, but use also Ozone Generator, several minutes daily.

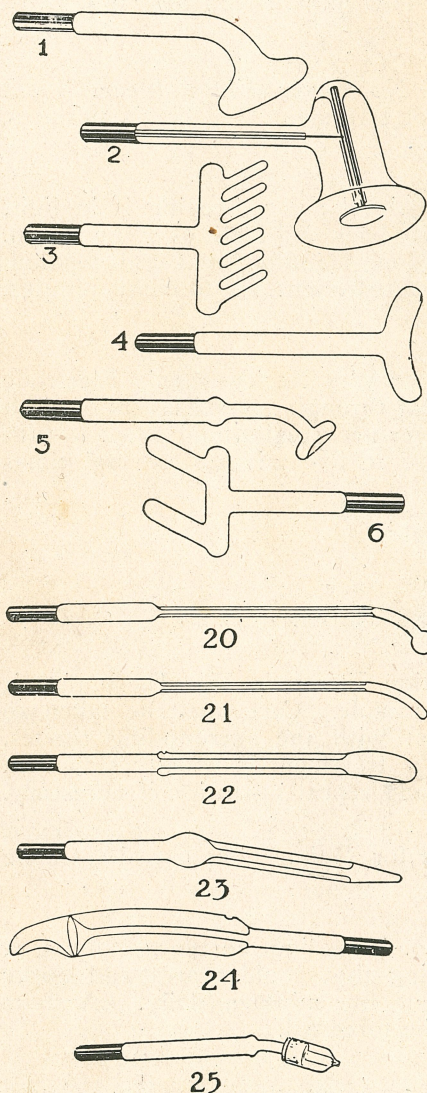
**WRITER'S CRAMP**—Apply Electrode No. 1, medium current, applying it from the finger tips, to and including the shoulder area and upper spinal centers. Duration of treatment, five minutes, daily. A short spark is preferable providing it can be tolerated.

**WRINKLES**—Apply Electrode No. 1, using medium current. Move slowly in a rotary movement. Duration of treatment, four minutes, twice daily.



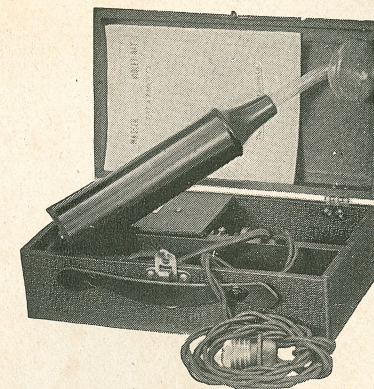
## ELECTRODES FOR WHITE CROSS

### *Violet Ray Generator*



- |       |  |
|-------|--|
| No.   |  |
| 1     | Surface Electrode                        |
| 2     | Condenser Electrode                      |
| 3     | Comb Electrode                           |
| 4     | Throat External Electrode                |
| 5     | Eye Electrode                            |
| 6     | Spinal Electrode                         |
| 19    | Nasal and Ear Electrode Insulated ✕      |
| 19-A. | Nasal Electrode Plain ✕                  |
| 20    | Internal Throat Electrode Insulated      |
| 20-A. | Throat Interior Electrode Plain ✕        |
| 21    | Urethral Electrode Insulated             |
| 21-A. | Urethral Electrode Plain ✕               |
| 22    | Prostatic Electrode Insulated            |
| 23    | Rectal Electrode Plain                   |
| 24    | Vaginal Electrode Insulated              |
| 24-A. | Vaginal Electrode Perforated Insulated ✕ |
| 24-B. | Vaginal Electrode Plain ✕                |
| 25    | Cautery Electrode                        |
| 30    | Ozone Generator ✕                        |

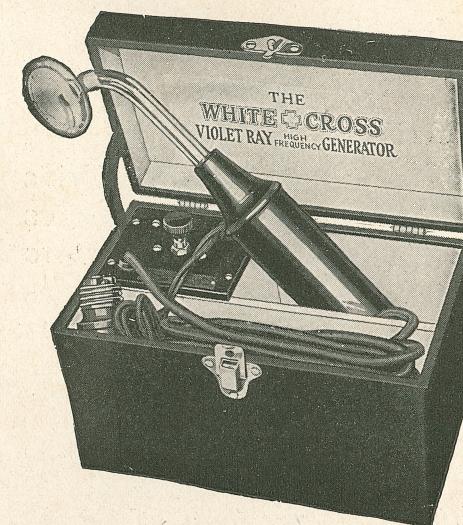
✕ Not Illustrated.



### No. 53 White Cross Violet Ray

Universal Current, Wide Current Regulation, Highly Polished Handle, Heavy Insulated, Good Carrying Case, Treatment Book, Fully Guaranteed. Complete with Surface Electrode.

Size— $3\frac{1}{2} \times 7 \times 10\frac{1}{2}$ "—Gross weight, 4 lbs.; net weight  $3\frac{1}{2}$  lbs. Packed one in a carton.



### No. 54 White Cross Violet Ray Outfit

The No. 54 illustrated is a portable High Frequency Outfit De Luxe. Extremely compact, efficient, powerful, safe and economical.

The coils are mounted in a leatherette carrying case and weighs  $3\frac{3}{4}$  pounds. Treatment book and instructions for operating are furnished free.

Size  $6\frac{1}{2} \times 6\frac{1}{2} \times 9$  inches. Gross weight,  $4\frac{1}{4}$  lbs. Net weight,  $3\frac{3}{4}$  pounds.

**WHEN ORDERING BE SURE TO SPECIFY VOLTAGE**